**EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with Nikolaus Schibli on 05/07/2009.

Please amend the claims as follows:

Claim 1 (Currently Amended):  An information retrieval system ~~implemented on~~

~~one or more data processors~~ in which information items map to respective nodes in an

array of nodes by mutual similarity of said information items, so similar information items

map to nodes at similar positions in said array of nodes to form a self-organizing map,

said system comprising:

(i) a processor;

[[(i)]] (ii) a graphical user interface configured to display a representation of nodes

of the self-organizing map as a two-dimensional display array of display points within a

display area on a user display;

[[(ii)]] (iii) a user control configured to define a two-dimensional region of said

display area;

[[(iii)]] (iv) a detector configured to detect those display points lying within said two-dimensional region of said display area; and

[[(iv)]] (v) a comparator configured to compute a quantization error of a newly received information item and comparing the quantization error to the self-organizing map, and configured to retrain the self-organizing map when the quantization error is above a predetermined threshold, wherein

said graphical user interface is further configured to concurrently display a list of data representing information items, being those information items mapped onto said nodes corresponding to display points displayed within said two-dimensional region of said display area; and said graphical user interface is configured to provide a dither component so as to display nodes that have substantially identical or identical information items at different locations in a display area to visibly distinguish the nodes have substantially identical or identical information items, the dither component being a random addition to a node position of up to a half of a separation between adjacent nodes.

Claim 9 (cancelled).

Claim 12 (Currently Amended):  An information storage system in which information items are processed so as to map to respective nodes in an array of nodes by mutual similarity of the information items, such that similar information items map to

nodes at similar positions in the array of nodes to form a self-organizing map, the

system comprising:

<u>a processor;</u>

a generator configures to generate a feature vector derived from each

information item of the self-organizing map, the feature vector for an information item

representing a set of frequencies of occurrence, within that information item, of each of

a group of information features; [[and]]

mapping logic configured to map each feature vector to a node in the self-

organizing map, the mapping between information items and nodes in the array

including a dither component configured to display nodes that have substantially

identical or identical information items at different locations arising from an application of

the dither component in a display area to visibly distinguish the nodes having

substantially identical or identical information items<u>;</u>

<u>logic configured to map a newly received information item to a node in the array</u>

<u>of nodes;</u>

<u>a mapping error detector configured to detect a mapping error as the newly</u>

<u>received information items is so mapped; and</u>

<u>logic, responsive to a detection that the mapping error exceeds a threshold error</u>

<u>amount, configured to initiate a remapping process of the set of information items and</u>

<u>the newly received information item,</u>

wherein the dither component is a random addition to a node position of up to a

half of separation distance between adjacent nodes<u>.</u>

Claim 13 (cancelled).


Claim 16 (Currently Amended):  An information storage method in which information items are processed so as to map to respective nodes in an array of nodes by mutual similarity of the information items, such that similar information items map to nodes at similar positions in the array of nodes to form a self-organizing map, the method comprising:

generating a feature vector derived from each information item of the self-organizing map, the feature vector for an information item representing a set of frequencies of occurrence, within that information item, of each of a group of information features; [[and]]

mapping each feature vector to a node in the self-organizing map, the mapping between information items and nodes in the array including a dither component configured to display nodes that have substantially identical or identical information items at different locations arising from an application of the dither component in a display area to visibly distinguish the nodes having substantially identical or identical information items;

mapping a newly received information item to a node in the array of nodes;

detecting a mapping error as the newly received information items is so mapped; and

initiating a remapping process of the set of information items and the newly

received information item logic, in response to a detection that the mapping error

exceeds a threshold amount,

wherein the dither component is a random addition to a node position of up to a

half of separation distance between adjacent nodes.


Claim 17 (Currently Amended):  An information retrieval method in which a set of

distinct information items map to respective nodes in an array of nodes by mutual

similarity of said information items, so similar information items map to nodes at similar

positions in said array of nodes to form a self-organizing map, said method comprising:

(i) displaying a representation of at least some of said nodes of the self-

organizing map as a two-dimensional display array of display points within a display

area;

(ii) defining, with a user control, a two-dimensional region of said display area;

(iii) detecting those display points lying within said two-dimensional region of said

display area;

(iv) displaying, concurrently with the representation of at least some of said

nodes, a list of data representing information items, being those information items

mapped onto said nodes corresponding to display points displayed within said two-

dimensional region of said display area; [[and]]

(v) computing a quantization error of a newly received information item,

comparing the quantization error to the self-organizing map, retraining the self-

organizing map when the quantization error is above a predetermined threshold; and

(vi) applying a dither component so as to display nodes that have substantially

identical or identical information items at different locations in a display area, to visibly

distinguish the nodes have substantially identical or identical information items, the

dither component being a random addition to a node position of up to a half of a

separation between adjacent nodes.

Claim 19 (Currently Amended): A computer readable storage medium having

program code recorded thereon, the program code configured to carry out a method

according to Claim 16 when executed on a computer.

Claim 23 (Currently Amended): A computer readable storage medium having

program code recorded thereon, the program code configured to carry out a method

according to Claim 17 when executed on a computer.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Andrea N. Long whose telephone number is 571-270-

1055. The examiner can normally be reached on Mon - Thurs 6:00 am to 3:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, William Bashore can be reached on 571-272-4088.  The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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